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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,850

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Robert W. Faber

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT

PAPER NUMBER

2136

MAIL DATE

DELIVERY MODE

07/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/773,850

Applicant(s)

FABER ET AL.

Examiner

Brandon S. Hoffman

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2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 13-18 are presented for examination.
2. Applicant's arguments, filed May 8, 2007, have been fully considered but they are moot in view of the new ground of rejection.

Claim Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Thomlinson et al. (U.S. Patent No. 5,778,069).

Regarding claim 13, Thomlinson et al. teaches a pseudo random number generator comprising:

- A cipher unit to generate a sequence of ciphering bits to cipher a stream of data **including at least video data** (fig. 3, ref. num 44); and
- A state machine coupled to the cipher unit to also use the ciphering unit to generate a plurality of pseudo random numbers based on selected ones of said cipher bits (fig. 3, ref. num 46).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomlinson et al. (USPN 069) in view of Utz (U.S. Patent No. 5,680,131).

Regarding claim 14, Thomlinson et al. teaches all the limitations of claim 13, above. However, Thomlinson et al. does not teach all the states of the state machine. Utz teaches wherein the state machine operates in a selected one of a continuous clocking state, a first cipher bit taking state, an output state, a second cipher bit taking state, and an authenticated state, wherein the state machine causes the cipher unit to be continuously clocked while in said continuous clocking state to introduce entropy in said cipher unit, causes first and second plurality of said cipher bits to be taken and stored, in said first and second cipher bit taking states respectively, causes the stored first/second cipher bits to be output as first/second random number, causes the cipher bits of the cipher unit to be used to cipher said stream of data during said authenticated state (col. 6, line 37 through col. 7, line 17 and col. 7, line 61 through col. 8, line 13).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the specific states of the state machine, as taught by

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Utz, with the random number generator of Thomlinson et al.. It would have been obvious for such modifications because the specific states cause secured data to be produced.

Regarding claim 15, Thomlinson et al. as modified by Utz teaches wherein the state machine is equipped to transition from said continuous clocking state to said first **cipher bit** taking state, in response to a subsequent request after n clocks for said first pseudo random number, where n is an integer, and to transition from said first **cipher bit** taking state to said output state, upon storing the first output cipher bits (see col. 6, lines 37-65 of Utz).

Regarding claim 16, Thomlinson et al. as modified by Utz teaches wherein the state machine is equipped to transition from said output state to a selected one of the continuously clocking state, the second **cipher bit** taking state, and the authenticate state depending on whether upon provision of the first pseudo random number, an indication of an unsuccessful authentication using the first pseudo random number, another request for a second pseudo random number, or an indication of a successful authentication using the first pseudo random number is received (see col. 6, line 66 through col. 7, line 17 and col. 7, line 61 through col. 8, line 13 of Utz).

Regarding claim 17, Thomlinson et al. as modified by Utz teaches wherein the state machine is equipped to transition from said second **cipher bit** taking state to said

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output state upon taking the second plurality of output cipher bits of the cipher unit and storing the second output cipher bits (see col. 6, line 37 through col. 7, line 17 of Utz).

Regarding claim 18, Thomlinson et al. as modified by Utz teaches wherein the state machine is further equipped to transition from said authenticated state to said second **cipher bit** taking stat upon receiving another request for a third pseudo random number, and to said continuously clocking state upon receiving a selected one of an unauthenticated notification and a detachment notification (see col. 8, lines 8-41 of Utz, the process goes back to step 306 to get another random number).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon Hoffman/

BH

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SUPERVISORY PATENT EXAMINER
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7/20/07